Economic Development and Jobs: Changes in Perceptions in the Study Communities

Report 4-85

Prepared for:

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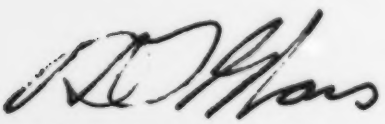
PREFACE

In 1982, the Department of Indian Affairs and Northern Development began its socio-economic impact monitoring program in connection with the Norman Wells Oilfield Expansion and Pipeline Project. This program, carried out under the direction of Professor R.M. Bone of the University of Saskatchewan, is, we believe, the first of its kind. Focussing on four Mackenzie Valley communities in the vicinity of the Norman Wells Project, this study was specially designed to allow monitoring of selected social and economic impacts through field surveys done before, during and after construction. The objective of the first field program, carried out in 1982, was acquisition of the baseline data, while the 1983 and 1984 field surveys captured the situation during the active construction phase. The 1985 fieldwork, done for the first time in all four of the survey communities by native organizations, provided the picture for the immediate post-construction period.

Various aspects of the 1982-84 portion of the project were analysed in the 1984 series of reports. This series discusses certain perspectives from the 1985 work, and, as well, deals with changes in selected factors between 1982 and 1985. In a subsequent, and final, series subjects dealt with will include the overall impacts of the Norman Wells Project and a discussion of the monitoring of socio-economic impacts in Canada.



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BACKGROUND TO THE NORMAN WELLS SOCIO-ECONOMIC IMPACT MONITORING PROGRAM

In mid-1979, Esso Resources Canada Ltd. and Interprovincial Pipeline Ltd. initiated discussions with the federal government concerning a major resource development project in the Mackenzie Valley in the Northwest Territories. This project, the Norman Wells Oilfield Expansion and Pipeline Project, was designed to increase production of oil at Norman Wells and carry this increased production through a small diameter pipeline from Norman Wells to Zama, Alberta to connect with the national oil pipeline system. The proposed project was brought to the attention of people in the Mackenzie Valley communities through community information meetings arranged by the companies and designed to inform local residents and businessmen of the potential job and contract opportunities associated with project construction.

During 1980, public hearings were held in northern communities by both the Federal Environmental Assessment and Review Office and by the National Energy Board. These public hearings provided a forum for individuals, native organizations, village councils, government agencies, companies and special interest groups to present their views on the proposed project and the implications of such development for the North and native peoples. The question of involvement of northern residents and businesses in the Norman Wells Project was of major concern during the public hearings, and both the federal and territorial governments indicated that the degree of northern participation in the project would be a key factor in their consideration of whether to approve or reject the Norman Wells Project. On July 30, 1981, the federal government announced its approval, subject to a two-year delay in the commencement of construction to allow government, the companies and northerners time to prepare for their participation in this project.

In early 1982, the Department of Indian Affairs and Northern Development recognized the need to monitor the impacts of the project on the four communities located along the pipeline route. These communities, Norman Wells, Fort Norman, Wrigley and Fort Simpson, were regarded as the ones most likely to receive the bulk of the socio-economic impacts caused by the construction of the Norman Wells Project. All of the socio-economic impacts had potentially positive and negative effects on the communities and local people, and the monitoring program was intended to capture these and evaluate them against the background of pre-construction baseline data on selected indicators.

Carried out by the Department of Geography of the University of Saskatchewan under the direction of Dr. Robert M. Bone, the monitoring program consisted of gathering data from local residents on their household and business characteristics over the course of the construction phase. The framework for this work consisted of three parts: (1) pre-construction phase; (2) construction phase; and (3) a post-construction phase. The field work and data preparation took place from 1982 to 1986. A series of reports based on the data may be obtained from the Department of Indian Affairs and Northern Development.

1. INTRODUCTION

Perceptions of the impacts of the Norman Wells Project on local residents are an extremely important aspect of the Norman Wells Socio-Economic Monitoring Program. The attitudes of the northern people towards jobs and economic development will undoubtedly affect decisions on future industrial projects in northern Canada.

The DIAND Norman Wells Socio-Economic Impact Monitoring Program has conducted household surveys in the communities of Norman Wells and Fort Norman in 1982, 1984 and 1985 and in the communities of Wrigley and Fort Simpson in 1982 and 1985. The 1984 survey did not take place in Wrigley and Fort Simpson at the request of the band councils. The data for this report is derived from a series of perception questions in the household questionnaire.

This report examines the perceptions of the residents of the four study communities towards four topics: (1) the perceived need for more jobs; (2) those in favour of increased economic development; (3) the preferred scale of potential new development; and (4) the favoured types of new development.

The format of the report will be to provide overall results and figures in the text of the report while more detailed statistics will added in an appendix.

2. THE PERCEIVED NEED FOR MORE JOBS IN EACH STUDY COMMUNITY

The first question deals with the perceived need for more jobs in each community. The question reads:

Is there a need for more jobs in your community?

___ Yes

___ No

___ Undecided

The results to this question reveal a consistently high desire for more jobs in each year for the native communities of Fort Norman, Wrigley and Fort Simpson (Table 1).

Table 1 Perceived Need for More Jobs in the Study Communities

		Norman Wells	Fort Norman	Wrigley	Fort Simpson
1982	Yes	44.7%	93.8%	76.2%	89.2%
	No	30.3%	4.2%	0.0%	5.4%
	Undcd(*)	25.0%	2.1%	23.8%	5.4%
		n = 76	n = 48	n = 21	n = 185
1984	Yes	35.0%	97.2%	-	-
	No	54.2%	2.8%	-	-
	Undcd	10.8%	0.0%	-	-
		n = 120	n = 36		
1985	Yes	63.9%	100.0%	100.0%	94.1%
	No	14.6%	0.0%	0.0%	0.0%
	Undcd	21.5%	0.0%	0.0%	5.9%
		n = 144	n = 59	n = 30	n = 186

Comment: * - Undecided (Undcd) on question of need for more jobs in their community.

In Norman Wells the perceived need for more jobs was substantially lower than the other three communities during the construction of the Norman Wells Project. However, the perceived need for more jobs rose dramatically in Norman Wells when the construction work was finished.

In the next section, the strong desire for more jobs in Fort Norman, Wrigley and Fort Simpson is examined and then a detailed analysis of the shifts in perceptions in Norman Wells is provided.

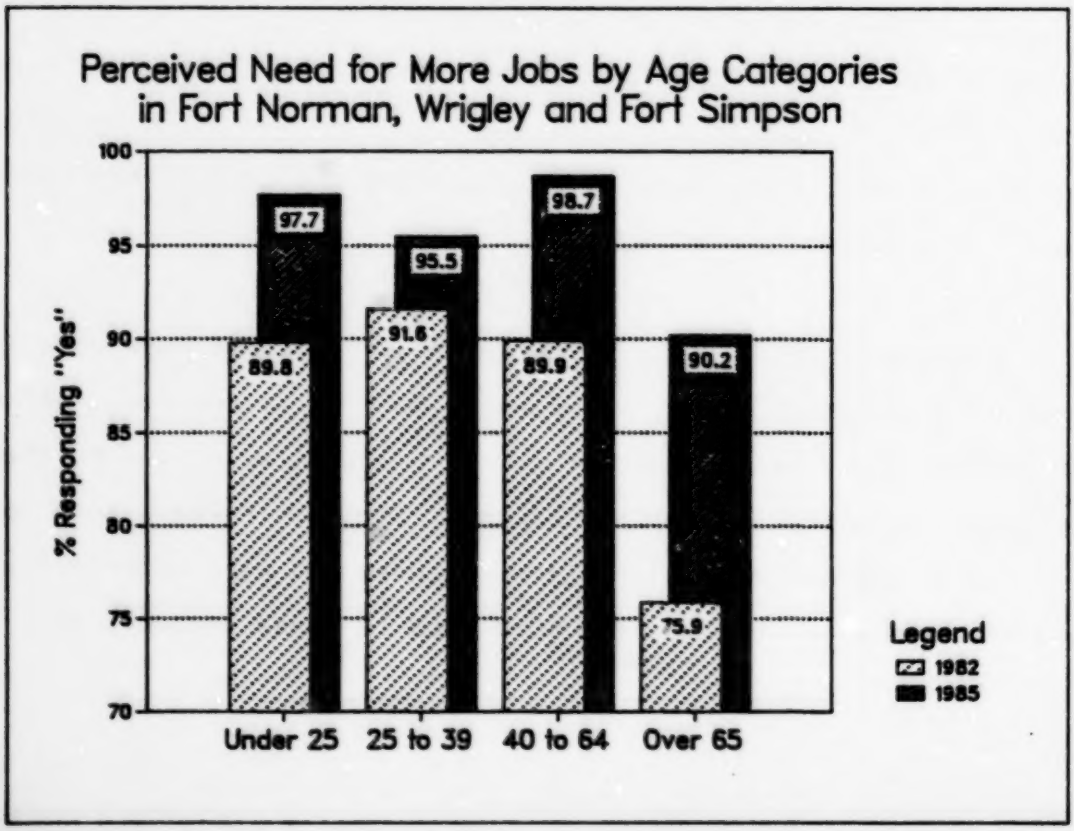
2.1 Fort Norman, Wrigley and Fort Simpson

In 1982, 242 out of 254 heads of households surveyed in these three communities responded that there was a need for more jobs in their community. By 1985, all of the 275 households surveyed in the three communities responded positively for more jobs in their own community.

Although there was virtually no one against more jobs in each of these communities, there was a portion of the population undecided about this need for more jobs (Table 1). Further breakdown by ethnicity and age of the respondent reveal some of the more common characteristics of those who were undecided or who felt there was no need for more jobs in these communities.

On the basis of ethnicity, the non-native portion of the population is generally less likely to perceive a need for more jobs than the natives. For example in 1982, 15% of the non-natives, while only 7.7% of the natives in Fort Simpson, were either against or undecided over the need for more jobs (Table 2 in Appendix A). In 1985, 9.4% of the non-natives and 4.5% of the natives at Fort Simpson were undecided on the need for more jobs while no one was opposed to more jobs in Fort Simpson. A possible explanation for the higher perceived need for more jobs among native respondents is the higher unemployment levels among this segment of the population (Stewart, Report 2-85, p.27).

Figure 1



In terms of the perceived need for more jobs by the age of the respondent, Figure 1 indicates that the oldest age category, 65 and over, were less in favour of more jobs. This trend was especially true in 1982 when about 90% of those under 65 in Fort Norman, Wrigley and Fort Simpson perceived a need for more jobs while only 76% over 65 felt more jobs were needed. A possible explanation is that more of the older residents feared that the growth of the wage economy would damage the land-based traditional activities so were less in favour of more jobs for the community.

2.2 Norman Wells

There was a dramatic increase in the perceived need for more jobs at Norman Wells at the end of the construction period (Table 1). This increase is not surprising considering the completion of the Norman Wells Project and subsequent decrease in the demand for workers. A closer look at the responses by particular groups of Norman Wells residents provides further insights. In the following pages responses are examined by sex, length of residency and descent of the respondents.

A breakdown of responses to the question on the need for more jobs on the basis of sex reveals that there is little difference between responses of the two sexes (Table 1 in Appendix A). Males in favour of more jobs increased from 47% in

1982 to 63% in 1985 while females in favour of more jobs increased from 42% to 65% during the same time period.

Figure 2

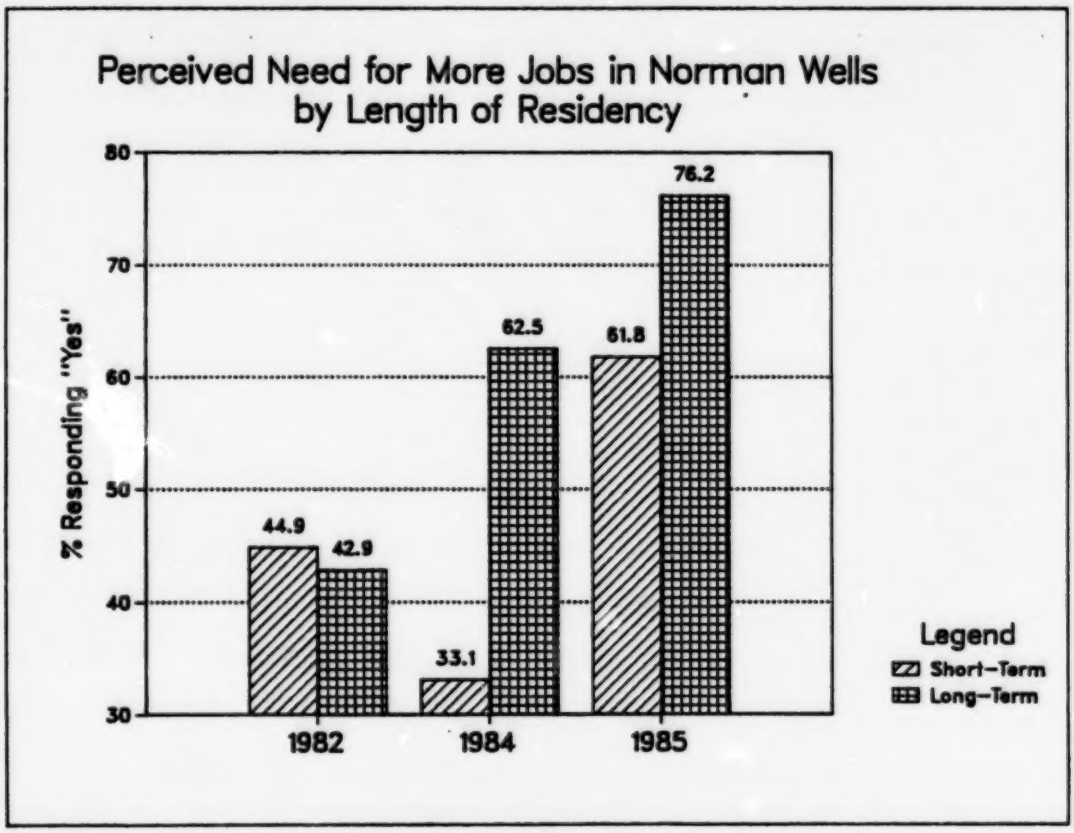


Figure 2 indicates that the desire of short-term residents for more jobs did not rise as quickly or to as high a level as that of the long-term residents. In this figure long-term residents are defined as those living in Norman Wells for more than ten years.

In terms of ethnicity of the respondent, Norman Wells fits the pattern seen in the other three communities. Natives perceive a greater need for more jobs than the non-natives. In 1985 for example, 59% of the non-natives perceived a need for more jobs while 82% of the native respondents felt there was a need for more jobs in Norman Wells (Table 2 in Appendix A). Although native unemployment levels are relatively low in Norman Wells, this result is not surprising because of the close cultural and family ties between native families in Norman Wells and surrounding communities, where unemployment levels are much higher. For example in 1985, unemployment levels averaged 33% for the native portion of the population in the three native communities. This figure compares with 5% unemployment for natives over sixteen years old at Norman Wells.

In conclusion, three important trends can be seen in the four study communities.

1. There is an exceptionally high perceived need for more jobs in the three communities of Fort Norman, Wrigley and Fort Simpson.
2. The perceived need for more jobs increased dramatically in Norman Wells in the immediate post-construction phase of the Norman Wells Project.
3. Natives perceive a greater need for more jobs than do non-natives in all four study communities.

3. INCREASED ECONOMIC DEVELOPMENT OF THE MACKENZIE VALLEY

The desirability of economic development in the Canadian

north has long been the focus of some debate. This debate, although often waged by politicians and academics, keys on the impact of economic development on the residents of the north. The second question which is examined asks the residents of the four communities their views on this issue. The question reads:

> Do you favour increased economic development in the Mackenzie Valley?
>
> __ Yes
> __ No
> __ Undecided

The results to this question are shown in Table 2. In each of the four study communities, the majority of the residents favour increased economic development in the Mackenzie Valley.

Table 2 Responses to Question on Those in Favour of Increased Economic Development in the Mackenzie Valley

		Norman Wells	Fort Norman	Wrigley	Fort Simpson
1982	Yes	80.3%	83.3%	52.4%	78.8%
	No	10.2%	6.3%	0.0%	7.1%
	Undcd	9.5%	10.4%	47.6%	14.1%
		n = 76	n = 48	n = 21	n = 184
1984	Yes	76.0%	83.4%	-	-
	No	15.7%	8.3%	-	-
	Undcd	8.3%	8.3%	-	-
		n = 121	n = 36		
1985	Yes	76.9%	66.1%	73.3%	59.4%
	No	6.3%	6.8%	3.3%	12.8%
	Undcd	16.8%	27.1%	23.4%	27.8%
		n = 143	n = 59	n = 30	n = 187

However, there has been a significant downward shift during the four years of the Norman Wells Project. From 1982 to 1985 there have been drops of 17 and 20 percentage points in those in favour of increased economic development in Fort Norman and Fort Simpson, respectively. It is int resting to note that those against increased economic development did not significantly increase from 1982 to 1985 while those who were undecided approximately doubled in both Fort Norman and Fort Simpson. Another interesting aspect of this table is the increase in support for economic development in Wrigley (+20.9). In Norman Wells, where most of the impacts from the Norman Wells Project were felt, support for increased economic development did not significantly change (-3.4). In the next section, these shifts are examined in terms of sex, ethnicity and age of the respondent.

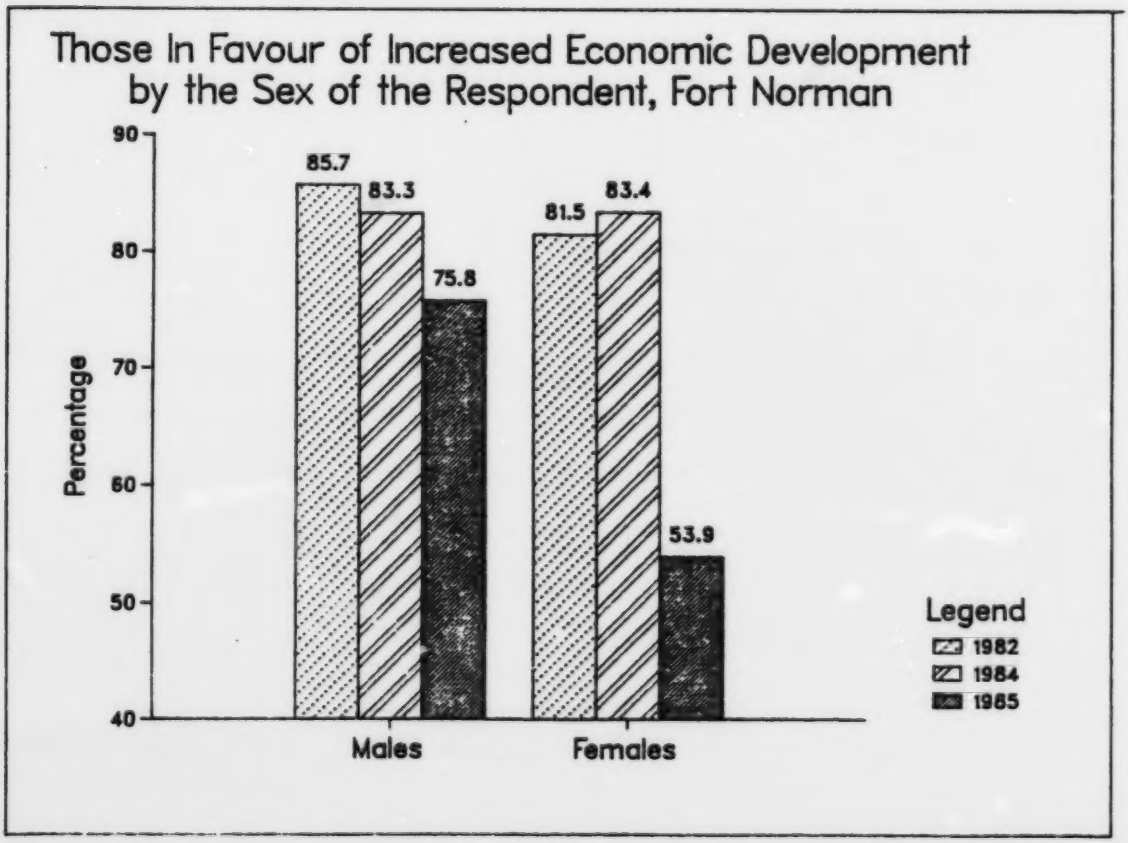
3.1 Sex of the Respondent

There are differences in the responses of males and females to the question on increased economic development (Table 5 in Appendix A). In Norman Wells, the percentage of females in favour of increased economic development dropped from 82% in 1982 to 72% in 1985 while male support increased slightly during this time period from 79% to 82%.

In Fort Simpson, the support for increased economic

development significantly declined for both sexes from 1982 to 1985. The drop, from 83% to 59%, was much sharper for males than for females, 73% to 60%. Due to the small number of households in Wrigley it is difficult to subdivide the population into categories, although it does appear that economic development is more popular among females than males. In 1985, 10 out of 11 women who responded for their households were in favour of increased economic development. This compares with 12 out of 19 male respondents in Wrigley who favoured increased development in 1985.

Figure 3



The most striking difference between the responses of the two sexes is found in the community of Fort Norman (Figure 3). The drop of almost 30 percentage points in the percentage of females in favour of increased economic development is unexpected considering there was a drop of only 7 percentage points among the males of Fort Norman from 1984 to 1985. A possible explanation of this large drop in the support of females for increased development may be found in their employment levels. In Report 2-85 of this DIAND series it was noted that:

> "It is clear that many women in Fort Norman attempted to enter the active labour force between 1982 and 1984. However, unemployment levels and part-time employment increased substantially for women from 1982 to 1984." (Stewart, 1985, p.34)

Given the apparent limited success of women in Fort Norman in capturing the employment benefits of the Norman Wells Project, their decreased support for economic development is not surprising.

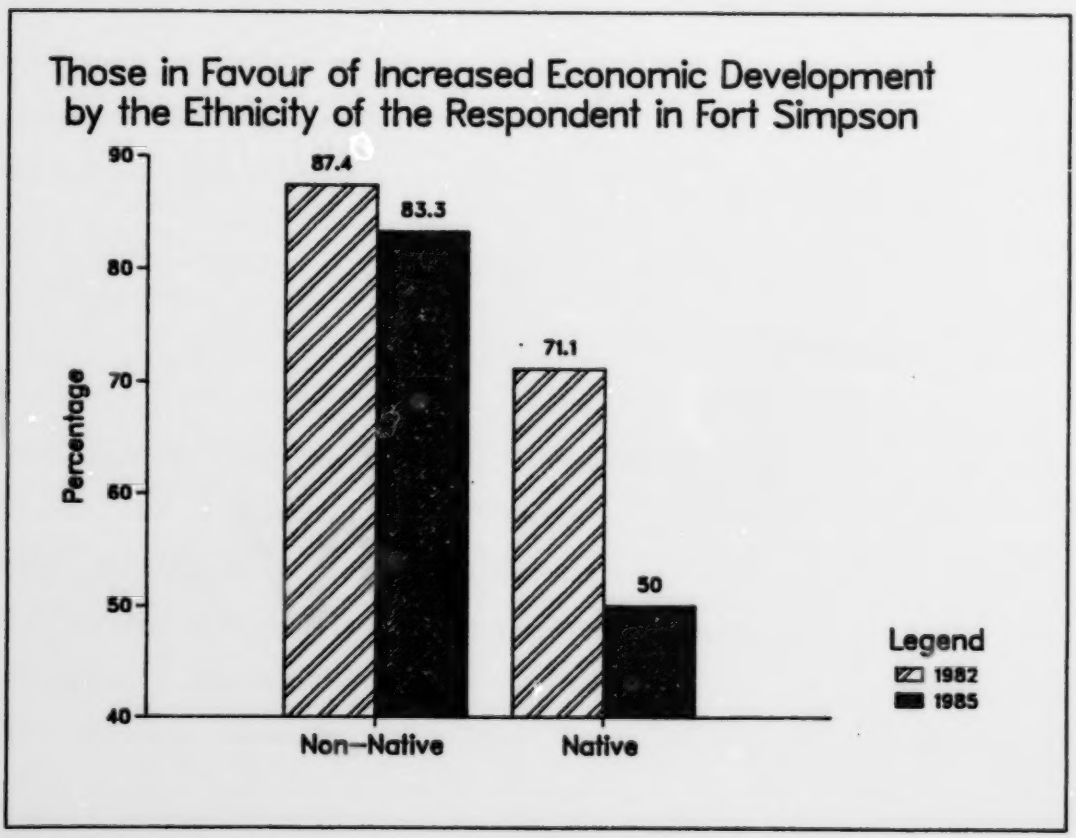
3.2 Ethnicity

One of the important aspects of the Norman Wells Socio-Economic Monitoring Program is the capacity to identify impacts by the descent of the respondents. This ability can be extended into the area of perceptions to examine for differences in responses by the ethnicity of the respondent. A complete breakdown of native/non-native responses for each community for

the question on increased economic development can be found in Table 6 in Appendix A. Fort Simpson has the most ethnically diversified population of all the communities. It has approximately 30% of its population which are non-native with the rest being a mixture of Dene and Metis. For this reason the responses by descent for Fort Simpson deserve a closer look.

A breakdown of native and non-native responses on the question on increased economic development is provided in Figure 4.

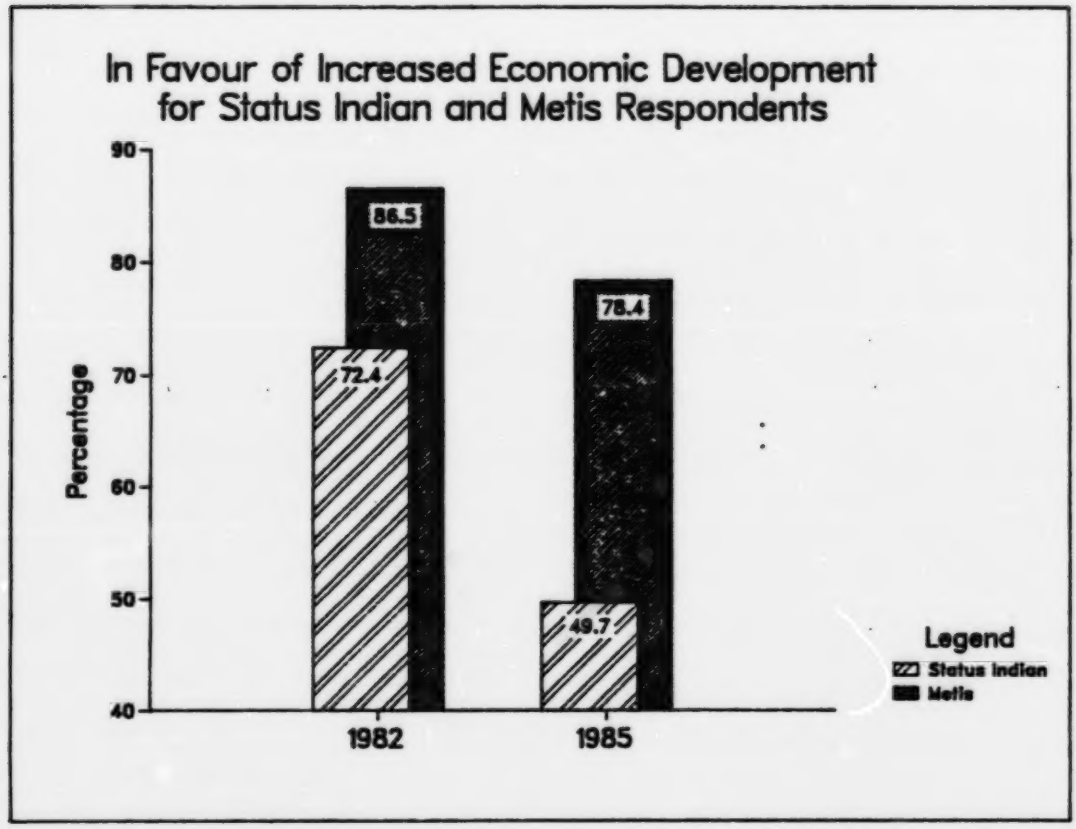
Figure 4



It was noted in the introduction to this section that the overall percentage of the population in favour of increased economic development had dropped in Fort Simpson from 1982 to 1985. Most of this drop can be attributed to the native portion of the population in Fort Simpson (Figure 4). This large drop in support of increased development by the natives in Fort Simpson, while the non-native support remained relatively unchanged, may be the consequence of the experience that Fort Simpson's natives had with the Norman Wells Project. Figures from Interprovincial Pipeline Ltd. reveal that Fort Simpson received the least amount of contracts to work on the pipeline on a per capita basis. As of June 1984, Fort Simpson businesses received contracts worth approximately $6000/resident, while Fort Norman and Wrigley each received contracts at about $11000/resident and Norman Wells about $23000/resident (Bone, 1985, p.17).

There is an important difference in responses by Status Indians and Metis in the four study communities with a much higher percentage of Metis favouring increased economic development (Figure 5). In fact, the support by Metis for increased economic development was greater than the support by the non-native residents of the region in 1982 (85.8%).

Figure 5



The relatively small drop in support for economic development from 1982 to 1985 by the Metis may indicate that the Metis were better able to capture the economic benefits and avoid the social costs of the Norman Wells Project.

3.3 Age of the Respondent

The breakdown of responses by age is provided in Table 7 in Appendix A. Two communities, Norman Wells and Fort Simpson, have

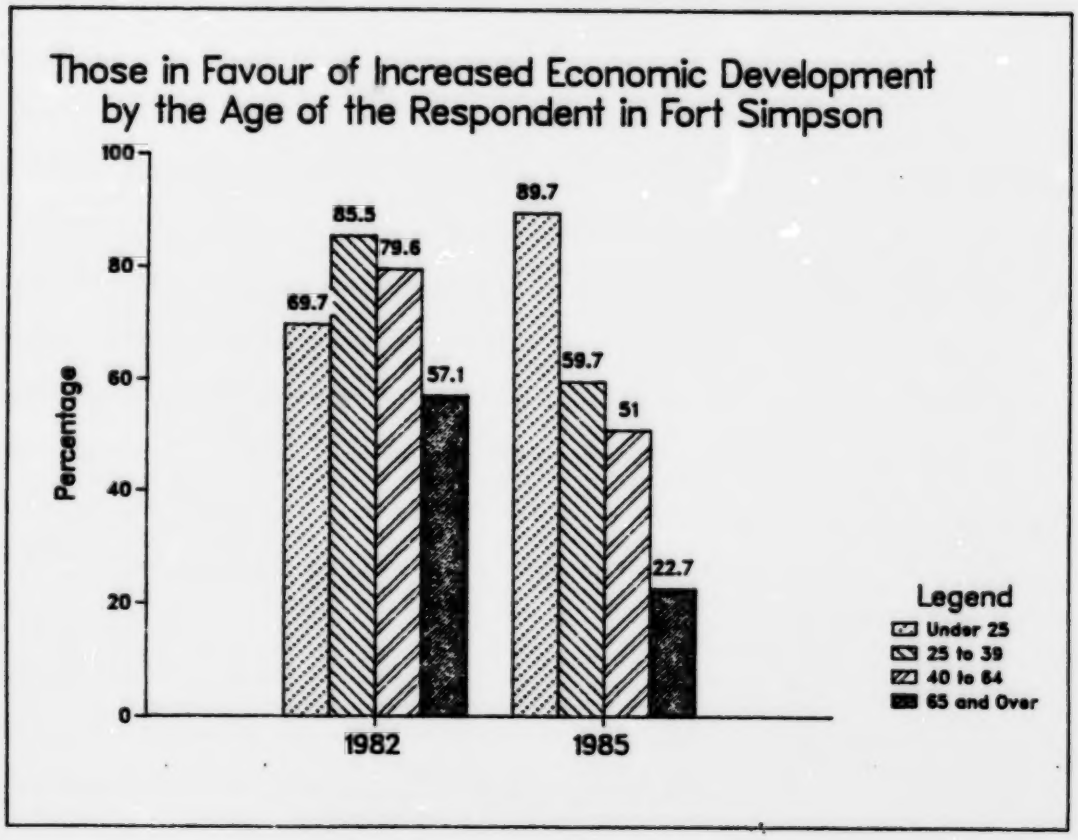
interesting age patterns in their responses to the question on economic development and merit mention in this section.

In Norman Wells, the percentage of residents under forty years old in favour of increased economic development remained steady around 75% in the three survey years while those respondents over forty averaged 85% in favour of increased development during the same period. This finding was not expected; rather it was expected that as age increased those in favour of increased economic development would decline. An explanation of this unexpected result is that many of the senior management people with Esso who live in Norman Wells are likely above forty years old. Since Esso has an interest in increased economic development, it would not be surprising to find their management people also in favour of increased development.

In 1985, the percentage of respondents in Fort Simpson who were in favour of increased economic development by four age categories clearly indicate a trend whereby the older residents are much less in favour of economic development than the younger residents of Fort Simpson (Figure 6). This pattern suggests that the (1) older residents have a much greater preference for the traditional lifestyle and that (2) older people generally are more resistant to change than the younger generations. The high level of support of those under twenty-five for increased economic development in 1985 seems to indicate a stronger

interest in the wage economy than is found among the older residents.

Figure 6



4. THE PREFERRED SCALE OF DEVELOPMENT

Those residents who responded that they were in favour of increased economic development were then asked what scale of development they preferred. The choices in each of the survey

seasons was between (1) large, (2) small, or (3) large and small scale development projects. Although no rigid definition was provided for each category a project the size of the Norman Wells Project was generally considered large. The responses to this question are provided in Table 3 and reveal that there has been substantial shifts in the preferred scale of development. In 1982, the majority of residents preferred small scale development projects. Very few of the residents of the study communities responded that both large and small scale projects were desired.

Table 3 The Preferred Scale of Development

		Norman Wells	Fort Norman	Wrigley	Fort Simpson
1982	Large	36.4%	28.2%	54.5%	25.5%
	Small	54.5%	69.2%	45.5%	53.2%
	L & S	9.1%	2.6%	0.0%	21.3%
1984	Large	37.8%	23.1%		
	Small	41.1%	57.7%		
	L & S	21.1%	19.2%		
1985	Large	18.3%	15.8%	0.0%	12.0%
	Small	18.3%	18.4%	4.5%	25.0%
	L & S	63.4%	65.8%	95.5%	63.0%

Comment: L & S refers to large and small scale projects being preferred.

However, by 1985 over 60% of the respondents in all four communities stated that they wanted both large and small scale development projects. This reversal in the trend is the result of the continued poor employment levels of Fort Norman, Wrigley and Fort Simpson and the increased unemployment at Norman Wells. This suggests that by 1985 the majority of residents were no longer particular about the scale of development as long as there

was some increased development.

5. THE PREFERRED TYPE OF DEVELOPMENT

As well as responding as to the scale of development which they preferred, the respondents who favoured increased economic development were asked to rank several types of development on the basis of preference. Unfortunately, there was slight change in the types of development in 1984 which makes comparison difficult. In the 1984 questionnaire, market gardens were dropped as a choice for the type of development and road construction and pipeline construction were added. The 1984 and 1985 categories were exactly the same:

a) Forestry
b) Mining/Oil
c) Tourism
d) Pipeline Construction
e) Road Construction
f) House Construction
g) Fishing/Trapping/Hunting

Even with the slight difference between 1982 and the 1984 and 1985 categories, some interesting trends are revealed in the changing pattern of responses.

Tables 4 and 5 contain the percentage of possible #1 or #2 ranks (most favourable) that each type of development received in

each community. As a result the most popular development types in each community for each year are indicated.

In 1982, in Norman Wells the most popular type of development was house construction while the least popular type of development was fishing/trapping/hunting, which is not surprising given that Norman Wells is a predominantly non-native community. By 1984, the most popular type of development in Norman Wells was road construction although house construction still rated second (Table 5). The popularity of these two development types is expected in Norman Wells because of the need to relieve housing pressure and to improve the village's road system due to the influx of people to Norman Wells prior to the start of construction of the Norman Wells Project. The least popular type of further development in Norman Wells was again fishing/trapping/hunting in 1984 (Table 5).

The most unexpected result of the 1984 rankings in Norman Wells is that continued development of oil and mining activities rated fifth as the most desirable form of further development. Explanations for the lack of popularity of further oil and mining activities in Norman Wells in 1984 may be that (1) the residents felt that enough people were employed in oil and mining and further development should concentrate on other activities; and (2) residents selected those areas most in need of improvement in their community.

Table 4 Ranking of Types of Further Economic Development for the Four Study Communities, 1982

	Norman Wells	Fort Norman	Wrigley	Fort Simpson
Forestry	12.3	19.4	27.3	23.3
Mining/Oil	18.5	11.2	4.6	16.3
Tourism	21.9	9.7	4.6	14.6
Market Garden	12.3	9.7	0.0	10.4
House Constrn	28.9	19.4	22.7	26.4
Fish/Trap/Hunt	6.1	30.6	40.8	9.0
Total	100.0	100.0	100.0	100.0

Comment: The respondents were asked to rank from #1 (most preferred) to #6 (least preferred) these six types of development. These figures represent the percentage of the possible #1 or #2 ranks that each category received.

Table 5 Ranking of Types of Further Economic Development for the Four Study Communities, 1984 and 1985

	Norman Wells		Fort Norman		Wrigley		Fort Simpson	
	1984	1985	1984	1985	1984	1985	1984	1985
Forestry	5.2	4.7	18.2	3.1	-	10.0	-	7.1
Mining/Oil	10.5	18.4	9.1	3.1	-	5.0	-	10.3
Tourism	12.2	12.6	9.1	0.0	-	5.0	-	8.2
Pipelines	16.3	14.2	2.2	3.1	-	17.5	-	6.2
Road Constrn	32.0	26.3	18.2	15.7	-	22.5	-	23.1
House Constrn	20.3	17.9	25.0	37.5	-	15.0	-	32.8
Fish/Trap/Hunt	3.5	5.8	18.2	37.5	-	25.0	-	12.3
Total	100.0	100.0	100.0	100.0	-	100.0	-	100.0

Comment: The respondents were asked to rank from #1 (most preferred) to #7 (least preferred) these seven types of development. These figures represent the percentage of the possible #1 or #2 ranks that each category received for 1984 and 1985.

However by 1985, with the completion of the Norman Wells Project, unemployment had increased in Norman Wells and the popularity of oil and mining increased to second place. Road construction remained the most popular variety of development in 1985 while the least popular development types in Norman Wells in 1985 were forestry and fishing/trapping/hunting.

In 1982, the most popular type of potential further development in Fort Norman was fishing/trapping/hunting (Table 4). By 1984, house construction was considered the most popular for further development while fishing/trapping/hunting, road construction and forestry each were ranked relatively highly (Table 5). The least popular type of further development in 1984 was pipeline construction. In 1985 house construction and fishing/trapping/hunting tied as the most popular type of further development and pipeline construction again rated as the least favourable variety of further development.

In both 1982 and 1985, Wrigley's most preferred type of increased economic development was fishing/trapping/hunting. Oil and mining and tourism were the least popular further development types in 1985.

In Fort Simpson, house construction was the most favoured variety of development in 1982 (Table 4). The least favoured was fishing/trapping/hunting. In 1985, house and road construction

were the most favoured variety of increased development. The popularity of road construction is not surprising given the involvement of the band owned Deh Cho Corporation in the extension of the highway to Wrigley. The least preferred development activity was pipeline construction in 1985 (Table 5).

House and road construction are the most consistently preferred types of development activity in all four communities from 1982 to 1985. Fishing/trapping/hunting received almost all of its support from the more traditional communities of Fort Norman and Wrigley. In Norman Wells and Fort Simpson, there was little support for fishing/trapping/hunting as an area of increased economic development. Oil and mining activities and pipeline construction were among the least popular forms of development in the three native communities. Oil and mining and pipeline construction ranked no better than third in any of these communities in 1982 or 1985. The low popularity of oil related activities in the three native communities likely stems from the perceived lack of benefits received from the construction of the Norman Wells Oilfield Expansion and Pipeline Project.

6. SUMMARY AND CONCLUSIONS

The responses to questions on the perceived need for more jobs, the desirability of increased economic development of the Mackenzie Valley, and the scale and type of future development projects have been examined. The vast majority of residents in

the three native communities perceive a need for more jobs and the perceived need for more jobs has risen in Norman Wells at the end of the construction period. Overall, the percentage of residents in favour of increased development dropped significantly in Fort Norman and Fort Simpson from 1982 to 1985. However, this drop was not accompanied with an increase in those against increased economic development, but rather an increase in those undecided on the need for increased economic development. It was also noted that support for economic development increased in Wrigley from 1982 to 1985 and remained steady in Norman Wells. In the previous sections these shifts were more closely examined by the sex, descent and age of the respondents. The following summary statements are the major findings of this report:

1. There is an exceptionally high perceived need for more jobs in the three communities of Fort Norman, Wrigley and Fort Simpson.

2. The perceived need for more jobs rose dramatically in Norman Wells at the end of the construction phase of the Norman Wells Project.

3. Natives perceive a greater need for more jobs than do non-natives in all four study communities.

4. Although the overall support for increased economic development decreased in the four communities from 1982 to 1985, over 50% of the residents in each community were in favour of increased economic development during each survey year.

5. The large drop in those in favour of increased economic development in Fort Norman may be mainly attributed to a drop of 28 percentage points in the support of females for increased economic development.

6. The drop in the support for increased economic development in Fort Simpson is mainly the result of significantly declining support from the natives of

Fort Simpson. As well, the older residents of Fort Simpson are much less in support of economic development than the younger residents.

7. The Metis residents support increased economic development of the Mackenzie Valley much more than the Status Indians in the region.

8. Originally small scale development projects were preferred over large scale projects, but by 1985 the residents were much more willing to accept increased development at any scale.

9. The most favoured type of future development activity is road and house construction in the four communities. Further development of fishing/hunting/trapping is supported predominantly in the traditional communities of Fort Norman and Wrigley.

10. Oil and mining is not popular as an activity for further development outside the community of Norman Wells.

7. REFERENCES

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2. Brown, Debra 1984: Assessment of Selected Statistical Data from the Government of the Northwest Territories. Report 6-84 DIAND Norman Wells Report Series, Ottawa.

3. Stewart, David A. 1985: Population Impacts of the Norman Wells Project on the Four Study Communities 1982-1984. Report 2-85 DIAND Norman Wells Report Series, Ottawa.

8. APPENDIX A

Table 1 Response to Question on the Need for More Jobs by the Sex of the Respondent

		Norman Wells		Fort Norman		Wrigley		Fort Simpson	
		M	F	M	F	M	F	M	F
1982	Yes	47.4	42.1	95.2	92.6	72.2	100.0	90.9	85.9
	No	36.8	23.7	0.0	7.4	0.0	0.0	6.4	4.2
	Undcd	15.8	34.2	4.8	0.0	27.8	0.0	2.7	9.9
	n =	38	38	21	27	18	3	110	71
1984	Yes	41.8	26.4	100.0	100.0	-	-	-	-
	No	46.3	64.2	0.0	0.0	-	-	-	-
	Undcd	11.9	9.4	0.0	0.0	-	-	-	-
	n =	67	53	18	12				
1985	Yes	63.2	64.5	100.0	100.0	100.0	100.0	94.5	93.6
	No	16.2	13.1	0.0	0.0	0.0	0.0	0.0	0.0
	Undcd	20.6	22.4	0.0	0.0	0.0	0.0	5.5	6.4
	n =	68	76	33	26	19	11	91	94

Comment: This table illustrates the percentage of responses in each category (yes, no, undecided) for male (M) and female (F) respondents.

Table 2 Response to Question on the Need for More Jobs by the Ethnicity of the Respondent

		Norman Wells		Fort Norman		Wrigley		Fort Simpson	
		N	N/N	N	N/N	N	N/N	N	N/N
1982	Yes	66.7	43.5	95.0	83.3	76.0	-	92.3	85.0
	No	0.0	33.3	2.5	16.7	0.0	-	3.3	8.1
	Undcd.	33.3	23.2	2.5	0.0	23.8	-	4.4	6.9
	n =	6	69	40	6	21	0	91	87
1984	Yes	50.0	34.6	100.0	100.0	-	-	-	-
	No	25.0	55.4	0.0	0.0	-	-	-	-
	Undcd.	25.0	10.0	0.0	0.0	-	-	-	-
	n =	8	111	22	7				
1985	Yes	81.8	58.6	100.0	100.0	100.0	100.0	95.5	90.6
	No	0.0	18.9	0.0	0.0	0.0	0.0	0.0	0.0
	Undcd.	18.2	22.5	0.0	0.0	0.0	0.0	4.5	9.4
	n =	33	111	53	6	27	3	131	53

Comment: N - indicates native respondents in this and all further tables which are broken down on the basis of ethnicity. N/N indicates non-native respondents.

Table 3 Response to Question on the Need for More Jobs by the Age of the Respondent

		Norman Wells				Fort Norman			
		<24	25-39	40-64	≥65	<24	25-39	40-64	≥65
1982	Yes	40.0	46.8	42.1	-	100.0	94.1	100.0	71.4
	No	60.0	21.3	36.8	-	0.0	0.0	0.0	28.6
	Undcd.	0.0	31.9	21.1	-	0.0	5.9	0.0	0.0
	n =	10	47	19	0	6	17	18	7
1984	Yes	6.7	36.3	50.0	0.0	87.5	100.0	100.0	100.0
	No	66.7	53.7	45.8	100.0	12.5	0.0	0.0	0.0
	Undcd.	26.6	10.0	4.2	0.0	0.0	0.0	0.0	0.0
	n =	15	80	24	1	8	13	9	6
1985	Yes	70.0	58.2	82.6	60.0	100.0	100.0	100.0	100.0
	No	10.0	17.6	4.4	20.0	0.0	0.0	0.0	0.0
	Undcd.	20.0	24.2	13.0	20.0	0.0	0.0	0.0	0.0
	n =	20	91	23	10	3	23	19	14

		Wrigley				Fort Simpson			
		<24	25-39	40-64	≥65	<24	25-39	40-64	≥65
1982	Yes	-	100.0	57.1	75.0	87.9	90.5	90.7	78.6
	No	-	0.0	0.0	0.0	6.1	4.7	5.6	7.1
	Undcd.	-	0.0	42.9	25.0	6.0	4.8	3.7	14.3
	n =	0	6	7	8	33	84	54	14
1985	Yes	100.0	100.0	100.0	100.0	97.5	93.4	97.9	81.8
	No	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Undcd.	0.0	0.0	0.0	0.0	2.5	6.6	2.1	18.2
	n =	1	12	12	5	40	76	48	22

Table 4 Response to Question on the Need for More Jobs by the Years of Residency of the Respondent

		Norman Wells				Fort Norman			
		1-5	6-10	11-15	≥16	1-5	6-10	11-15	≥16
1982	Yes	43.4	50.0	50.0	40.0	100.0	85.7	-	93.9
	No	28.3	37.5	50.0	20.0	0.0	0.0	-	6.1
	Undcd.	28.3	12.5	0.0	40.0	0.0	14.3	-	0.0
	n =	53	16	2	5	8	7	0	33
1984	Yes	32.3	38.5	80.0	33.3	100.0	100.0	-	95.7
	No	55.6	53.8	20.0	66.7	0.0	0.0	-	4.3
	Undcd.	12.1	7.7	0.0	0.0	0.0	0.0	-	0.0
	n =	99	13	5	3	8	5	0	23
1985	Yes	61.9	61.1	63.6	90.0	100.0	100.0	100.0	100.0
	No	13.3	22.2	27.3	0.0	0.0	0.0	0.0	0.0
	Undcd.	24.8	16.7	9.1	10.0	0.0	0.0	0.0	0.0
	n =	105	18	11	10	11	8	3	37

		Wrigley				Fort Simpson			
		1-5	6-10	11-15	≥16	1-5	6-10	11-15	≥16
1982	Yes	-	100.0	-	75.0	84.4	87.5	84.6	95.8
	No	-	0.0	-	0.0	7.8	8.3	7.7	1.4
	Undcd.	-	0.0	-	0.0	7.8	4.2	7.7	2.8
	n =	0	1	-	20	77	24	13	71
1985	Yes	100.0	100.0	100.0	100.0	91.5	96.0	100.0	94.2
	No	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Undcd.	0.0	0.0	0.0	0.0	8.5	4.0	0.0	5.8
	n =	5	2	1	22	47	25	10	104

Table 5 Responses to the Question on those in Favour of Increased Economic Development by the Sex of the Respondent

		Norman Wells		Fort Norman		Wrigley		Fort Simpson	
		M	F	M	F	M	F	M	F
1982	Yes	79.0	81.6	85.7	81.5	50.0	67.7	82.6	73.2
	No	10.5	10.5	4.8	7.4	0.0	0.0	5.5	8.5
	Undcd	10.5	7.9	9.5	11.1	50.0	33.3	11.9	18.3
	n =	38	38	21	27	18	3	109	71
1984	Yes	80.6	70.4	83.3	83.4	-	-	-	-
	No	13.4	18.5	11.1	8.3	-	-	-	-
	Undcd	6.0	11.0	5.6	8.3	-	-	-	-
	n =	67	54	18	12				
1985	Yes	82.0	72.4	75.8	53.9	63.2	90.9	59.3	60.0
	No	9.0	4.0	3.0	11.5	5.3	0.0	13.2	11.6
	Undcd	9.0	23.6	21.2	34.6	31.6	9.1	27.5	28.4
	n =	67	76	33	26	19	11	91	95

Comment: This table illustrates the percentage of responses in each category (yes, no, undecided) for male (M) and female (F) respondents.

Table 6 Response to Question on Those in Favour of Increased Economic Development by the Ethnicity of the Respondent

		Norman Wells		Fort Norman		Wrigley		Fort Simpson	
		N	N/N	N	N/N	N	N/N	N	N/N
1982	Yes	50.0	84.1	82.5	83.3	52.4	-	71.1	87.4
	No	33.3	7.3	5.0	16.7	0.0	-	10.0	2.3
	Undcd.	16.7	8.7	12.5	0.0	47.6	-	18.9	10.3
	n =	6	69	40	6	21	0	90	87
1984	Yes	37.5	79.3	77.3	100.0	-	-	-	-
	No	37.5	13.5	13.6	0.0	-	-	-	-
	Undcd.	25.0	7.2	9.1	0.0	-	-	-	-
	n =	8	111	22	7				
1985	Yes	59.4	82.0	67.9	50.0	70.4	100.0	50.0	83.3
	No	9.4	5.4	5.7	16.7	3.7	0.0	15.9	3.7
	Undcd.	31.2	12.6	26.4	33.3	25.9	0.0	34.1	13.0
	n =	32	111	53	6	27	3	132	54

Table 7 Response to Question on Those in Favour of Increased Economic Development by the Age of the Respondent

		Norman Wells				Fort Norman			
		<24	25-39	40-64	≥65	<24	25-39	40-64	≥65
1982	Yes	100.0	72.3	89.5	-	83.3	88.2	83.3	71.4
	No	0.0	14.9	5.3	-	0.0	0.0	5.6	28.6
	Undcd.	0.0	12.8	5.2	-	16.7	11.8	11.1	0.0
	n =	10	47	19	0	6	17	18	7
1984	Yes	80.0	74.1	83.3	0.0	87.5	76.9	77.8	100.0
	No	13.3	17.3	8.3	100.0	0.0	7.7	22.2	0.0
	Undcd.	6.7	8.6	8.4	0.0	12.5	15.4	0.0	0.0
	n =	15	81	24	1	8	13	9	6
1985	Yes	70.0	74.7	90.9	80.0	33.3	73.9	63.2	64.3
	No	0.0	7.7	4.5	10.0	0.0	8.7	5.3	7.1
	Undcd.	30.0	17.6	4.6	10.0	66.7	17.4	31.5	28.6
	n =	20	91	22	10	3	23	19	10

		Wrigley				Fort Simpson			
		<24	25-39	40-64	≥65	<24	25-39	40-64	≥65
1982	Yes	-	66.7	57.1	37.5	69.7	85.5	79.6	57.1
	No	-	0.0	0.0	0.0	12.1	3.6	7.4	14.3
	Undcd.	-	33.3	42.9	62.5	18.2	10.9	13.0	28.6
	n =	0	6	7	8	33	83	54	14
1985	Yes	0.0	83.3	75.0	60.0	89.7	59.7	51.0	22.7
	No	0.0	8.4	0.0	0.0	7.7	14.3	10.2	22.7
	Undcd.	100.0	8.3	25.0	40.0	2.6	26.0	38.8	54.6
	n =	1	12	12	5	39	77	49	19

Table 8 Response to Question on Those in Favour of Increased Economic Development by the Years of Residency of the Respondent

		Norman Wells				Fort Norman			
		1-5	6-10	11-15	≥16	1-5	6-10	11-15	≥16
1982	Yes	77.4	87.5	50.0	100.0	75.0	100.0	-	81.8
	No	11.3	12.5	0.0	0.0	0.0	0.0	-	9.1
	Undcd.	11.3	0.0	50.0	0.0	25.0	0.0	-	9.1
	n =	53	16	2	5	8	7	0	33
1984	Yes	75.8	84.6	60.0	75.0	87.5	100.0	-	78.3
	No	14.1	15.4	40.0	25.0	12.5	0.0	-	8.7
	Undcd.	10.1	0.0	0.0	0.0	0.0	0.0	-	13.0
	n =	99	13	5	4	8	5	0	23
1985	Yes	81.0	66.7	63.6	66.7	72.7	62.5	66.7	64.9
	No	3.8	22.2	9.1	0.0	9.1	12.5	0.0	5.4
	Undcd.	15.2	11.1	27.3	33.3	18.2	25.0	33.3	29.7
	n =	105	18	11	9	11	8	3	37

		Wrigley				Fort Simpson			
		1-5	6-10	11-15	≥16	1-5	6-10	11-15	≥16
1982	Yes	-	100.0	-	50.0	81.6	91.7	92.3	69.0
	No	-	0.0	-	0.0	5.3	0.0	7.7	11.3
	Undcd.	-	0.0	-	50.0	13.1	8.3	0.0	19.7
	n =	0	1	0	20	76	24	13	71
1985	Yes	80.0	50.0	100.0	72.7	76.6	76.0	63.6	47.1
	No	20.0	0.0	0.0	0.0	6.4	8.0	18.2	16.3
	Undcd.	0.0	50.0	0.0	27.3	17.0	16.0	18.2	36.6
	n =	5	2	1	22	47	25	11	104